

Executive Summary

Energy Savings Performance Contracting Reports

Federal Energy Management Advisory Committee

The Federal Energy Management Advisory Committee (FEMAC) was established by *Executive Order 13123 – Greening the Government through Efficient Energy Management*. The purpose of the committee is to provide the U.S. Department of Energy (DOE) with independent input on enhancing energy management in the Federal Government. The order directs FEMAC to address a range of issues, including how to improve the use of Energy Savings Performance Contracts (ESPCs) and utility Energy Service Contracts (UESCs), improve procurement of ENERGY STAR® and other energy efficient products, improve building design, reduce process energy use, and enhance applications of efficient and renewable energy technologies at Federal facilities.

Committee members are appointed by the Secretary of Energy and include representatives from Federal and state agencies; utility and energy service companies; environmental, energy, and consumer groups; and other energy-related organizations. DOE's Federal Energy Management Program coordinates FEMAC activities.

Introduction

During FEMAC's first public meeting in October 2000, members identified ESPCs as a priority issue and a vital tool for achieving Federal energy management goals. To address the financing of Federal energy management projects and support implementation of the ESPC program, FEMAC established an ESPC Working Group. The working group examined the full range of issues and benefits associated with using ESPCs to finance Federal energy management projects. This executive summary includes a description of the results of the ESPC Working Group's deliberations and recommendations, which were subsequently approved by the full committee:

- *FEMAC Resolution 04-01* – approved by FEMAC on June 9, 2004
- *ESPC Authority, Volume I* – September 2004
- *ESPC Management, Volume II* – May 2005

FEMAC Resolution 04-01 recommends the immediate and permanent reauthorization of ESPCs to implement energy and water saving projects in Federal Facilities. In addition, FEMAC members strongly support:

- Expanded authority for stand-alone water conservation projects,
- Further enhancements to the ESPC program to improve its effectiveness,
- Elimination of the statutory language requiring most civilian agencies to send 50 percent of their energy cost savings to the Treasury, and
- Pilot testing the expanded use of ESPCs for non-building applications.

ESPC Authority, Volume I This report provides an overview of Federal Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs) as alternative financing tools used by agencies to reduce energy use, modernize aging equipment, reduce maintenance costs, and deploy energy efficiency and renewable energy technologies. ESPCs and UESCs make up more than half of the Federal building energy efficiency investment and FEMAC regards these programs as essential to help the government achieve its 2005 and 2010 energy reduction goals.

FEMAC recognizes the vital role ESPCs and UESCs have played in helping the Federal Government meet or exceed its energy efficiency goals between 1995 and 2000. The Department of Defense (DOD) attributes more than 70 percent of its energy savings to the use of ESPCs and UESCs. Besides helping agencies make progress in meeting Federal energy, water, and emissions-reduction goals, ESPCs also help the Federal Government:

- Achieve healthier, safer, and more productive working conditions,
- Leverage private sector investment for untapped life-cycle cost savings when direct appropriations are not available,
- Increase energy and water efficiency and reduce costs,
- Enhance energy security, and
- Transfer and deploy renewables and innovative efficiency technologies in the Federal sector and stimulate economic development.

As a result of October 1, 2003, sunset of the authorization for the ESPC program, both public and private infrastructure for ESPC fell into jeopardy. Estimates indicate that there were nearly \$500 million worth of energy projects stalled by the lapse in authority. [Following FEMAC transmittal of this report to DOE, consequently, Congress reauthorized the Federal Government's use of ESPCs through October 1, 2006.]

It is the Federal Government's commitment to the economical use of public dollars, protection of the environment, and energy security that make ESPC authority a critical component of a balanced energy management strategy for improved energy efficiency and conservation at Federal facilities. Therefore, FEMAC strongly encourages Congressional action to immediately and permanently restore ESPC authority and Department of Energy (DOE) action to improve ESPC program effectiveness.

ESPC program effectiveness can be improved in a variety of ways and DOE should lead the charge to revise existing ESPC guidance and provide assistance to agencies to implement lessons learned and eliminate barriers to better implementation. Some of the areas for improvement on which DOE should focus its efforts include:

- Better measurement and verification (M&V) procedures,
- Improved options for financing projects, verifying the reasonableness of their pricing, and adding transparency and competition,
- Universal use of experienced project facilitators,
- Quality assurance across all Federal ESPC programs, and
- Further reductions in cost and cycle time of the ESPC procurement process.

ESPC Management, Volume II This second report builds on FEMAC's initial report, providing additional information and an analysis of the history of the ESPC program. More importantly, Volume II describes how the program has been implemented by Federal agencies, highlights the Federal Energy Management Program's (FEMP) critical role in facilitating ESPCs, and provides a listing of FEMAC-recommended improvements to achieve greater program effectiveness.

To date, ESPCs have been implemented by 18 agencies throughout the Federal sector, primarily through DOE FEMP and Department of Defense (DOD) umbrella contracts. The umbrella contracts provide government agencies with an effective, low-risk method for implementing energy savings projects even (and especially) when up-front funding is not available.

For all ESPC projects awarded since FY 1998, the guaranteed energy cost savings are \$3.7 billion, with anticipated net guaranteed cost savings of \$500 million after subtracting payments to the energy services companies (ESCOs) to cover principal, financing costs, and costs associated with performance-period services. The actual net cost savings to the government may be even larger, because ESCOs' savings estimates are usually conservative and the equipment life generally exceeds ESPC contract terms.

ESPCs account for 33 percent of energy use reduction for all agencies over the last four years (FY 1999 through 2003). Although energy reduction data is not yet available for FY 2004, it is anticipated that progress in savings will have

slowed, partly because of the lapse of ESPC authority. There is also concern that agencies may fail to attain the goal of a 30 percent reduction in energy consumption per gross square foot by 2005, as mandated by *Executive Order 13123 – Greening the Government through Efficient Energy Management*. The ESPC financing tool serves as one of the critical strategies for helping Federal agencies build momentum to meet the next goal – a 35 percent reduction in energy use by 2010.

DOE and DOD and the Federal ESPC Steering Committee, with cooperation from the ESCO industry, have led a major effort to improve ESPCs, particularly in the areas of reducing financing costs, determining price reasonableness, and measurement and verification (M&V) of energy and cost savings. FEMAC applauds these efforts and believes that the recent round of improvements will clearly support the case for permanent ESPC authorization.

ESPCs represent a relatively new contracting strategy that requires further enhancement for the concept to mature to its full potential. FEMAC recommends the following eight initiatives to further enhance the ESPC program in order to gain greater acceptance and support.

- Consolidate quality assurance and improvement activities under the auspices of the Federal ESPC Steering Committee.

- Reduce ESPC financing costs to maximize the benefit/cost impacts.

- Strengthen M&V procedures and contract administration.

- Periodically assess the performance of ESPC projects.

- Reduce the cycle time and transaction costs of entering into ESPCs.

- Increase the sharing of information and lessons learned between FEMP, Federal agencies, and state and local governments.

- Increase the application of advanced energy efficiency, distributed generation, and renewable energy technologies in ESPCs.

- Promote the benefits of ESPCs and encourage permanent authorization.

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